

### **REMARKS**

Claims 1-27 including multiple dependent claims were pending in the application.

Claims 1-27 including fewer multiply dependent claims are still pending in the application.

Claims 1, 11, 21, 22, and 25 were previously independent claims.

Claims 2, and 12 are now also independent claims, having been rewritten in independent form.

Claims 21, 22, 25, 26, and 27 are allowed.

Claims 2-6, 7/(2-6), 8/7/(2-6), 9/(2-6), 10/9/(2-6), 12-16, 17/(12-16), 18/17/(12-16), 19/(12-16), and 20/19/(12-16) have been identified as being objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

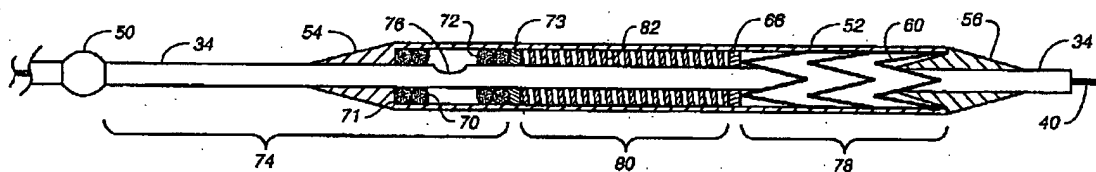
Claims 2 and 12 having been rewritten in independent form to make each dependent claim include nearly all the limitations (see next sentence) of the new base claim and any intervening claims. Claims 2 and 12, do not contain the limitation added to Claims 1 and 11 during the previous amendment, i.e., that the "... containment sheath is made of a second material [[different from said first material]] having a smooth inner surface . . . ." Thus Claims 2-6, 7/(2-6), 8/7/(2-6), 9/(2-6), 10/9/(2-6), 12-16, 17/(12-16), 18/17/(12-16), 19/(12-16), and 20/19/(12-16) have been amended in accordance with Examiner's comments and should be allowable.

#### **Rejection Under 35 U.S.C § 103 (a).**

Claims 1, 7/1, 8/7/1, 9/1, 10/9/1, 11, 17/11, 18/17/11, 19/11, 20/19/11, 23, and 24 stand rejected under 35 U.S.C § 103 (a) as being unpatentable over Fiedler (5,817,101) in view of Bartholf et al. (US Pub 2001/0034549).

In light of the Amendments made to the Claims above putting them into allowable form, only Claims 1, 11, 23/1, 23/11, and 24/11 appear to remain subject to this rejection under 35 U.S.C § 103 (a).

Claims 1 and 11 have been amended to clearly recite that the inner surface of the stent retention section (78) of the sheath has a lubricious quality, while the inner surface of the sheath adjacent the sheath retraction section of the catheter (80) is a “second material different from said first material having a smooth inner surface against which a first flexible seal structure of a fluid receiving chamber seals.” (Figure 3 is repeated here for convenience.)



**FIG. 3**

As described in the specification in the paragraph starting at page 8 line 30:

The containment sheath can be configured with a continuous single diameter from end to end. However, the material of the sheath can be different in different sections of the sheath. A stent retraction portion of the sheath adjacent to the compressed stent retention section 78 is constructed of a material having a lubricious inner surface having a low coefficient of friction so the stent graft 60 contained therein slides easily out during deployment as the sheath 52 is retracted. The material of the stent retraction portion of the sheath 52 having the desired frictional qualities has been generally found to be soft and susceptible to scoring and the creation of surface irregularities as the containment sheath 52 is retracted and the stent graft 60 is deployed. If the scoring and other surface defects on the inside surface of the stent retraction portion of the containment sheath 52 were to reach the location of the fixed seal 72 of the catheter 34, then the scoring and other surface irregularities on the inner surface of the sheath would create a leakage path for the fluid being contained by the seal and the seal would leak. Therefore, an intermediate section identified a stent retraction portion of the containment sheath 52 (initially positioned adjacent to a sheath retraction section 80 of the catheter body 34 is made of a material

whose surface is less susceptible to scoring and the introduction of other surface defects than the softer surface finish material of the stent retention portion. (*emphasis added*).

This sheath description and configuration is now clearly recited in amended Claims 1 and 11, i.e., using a sheath having two different inner surface materials one with a high surface lubricity and the other with a smooth surface suitable for sealing the fluid receiving chamber. The specification highlights that the lubricious material properties needed to release the stent (stent graft) from the stent (stent graft) retention section of the sheath allow grooving and pliability in the inner surface of the sheath is inconsistent with making a good fluid seal for the fluid receiving chamber. This structure is in contrast to the disclosure of the Fiedler patent, which clearly shows using the same inner surface for retaining the stent and for sealing the fluid receiving chamber as the sheath is retracted. No issue in creating a good fluid seal is identified. Only a hydraulically actuated sheath retraction would have a need for such a seal and such a variety in inner sheath surface material properties. Such variety is not suggested or needed in other non-hydraulically retracted sheath structures. A structure according to the recited claims in the present application, require a transition (buffer) zone (the sheath retraction section 80) between the stent (stent graft) retention section (78) and the fluid receiving chamber section (74) which is needed to accommodate and implement the use of different materials.

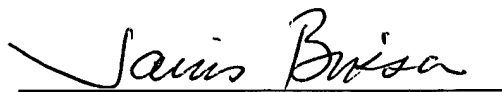
The Examiner has identified Bartholf et al. as disclosing several material in a sheath. Bartholf et al. discloses only one inner surface material - Teflon throughout (Pg. 4, para. [0034] and [0035] (inner teflon layer 68, inner teflon layer 69, and inner teflon layer 73). There is no suggestion of the use or need to utilize an inner surface having two material properties, only one inner surface material is disclosed. Bartholf et al. therefore provides no basis for rejection of Claims 1, and 11 as amended. Claims 23/1, 23/11, and 24/11 should also be allowable. Without some teaching or suggestion in the prior art a rejection based on obviousness cannot survive.

**Conclusion**

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at telephone (707) 566-1888.

Respectfully submitted,

*Nov 9, 2004*

A handwritten signature in cursive script, reading "Janis Biksa", written over a horizontal line.

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